LOGGED BY	BEGIN DATE	COMPLETION DATE	BOREHOLE LOCATION (Lat/Long or North/East and Datum)	HOLE ID
S. McLandrich	11-30-07	12-3-07	N2120765.394 / E5996357.147 (NAD83)	MPTNB-R2-PZ
DRILLING CONTRACTOR			BOREHOLE LOCATION (Offset, Station, Line)	SURFACE ELEVATION
Gregg Drilling and Testing, Inc.			Offset 66ft R Sta 61+77 NB Alignment	11.476 ft (NAVD88)
DRILLING METHOD			DRILL RIG	BOREHOLE DIAMETER
Mud Rotary			Failing 1500	5 in.
SAMPLER TYPE(S) AND SIZE(S) (ID)			SPT HAMMER TYPE	HAMMER EFFICIENCY, ERi
MC (2.4"), SPT (1.4"), Grab, Shelby (2.87"), Pitcher (2.87")			Automatic, 140 lbs., 30-inch drop	72.8%
BOREHOLE BACKFILL AND COMPLETION			GROUNDWATER READINGS DURING DRILLING AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING
2" dia. Standpipe Piezo Screened 30.0 to 45.0 ft			5	98 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	Description	Sample Location	Sample Number	Blows per 6 In	Blows per Foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (tsf)	Drilling Method	Casing Depth	Remarks
	0		Poorly graded GRAVEL with SAND (GP), dark brown, moist, GRAVEL is fine to coarse, SAND is fine to coarse, trace fines, pieces of brick, GRAVEL is subangular, occasional clumps of SANDY CLAY, earthy odor detected. [FILL]		S1										
9.48	2														
	3		SANDY Lean CLAY (CL), medium stiff, dark brown, yellowish brown, and grayish brown, moist, SAND is fine to medium.		S2	6 13 10	23	100							
7.48	4		Poorly graded SAND (SP), loose, yellowish brown, moist, fine, with trace fines.		S3	2 2 3	5	22		4.2	120.7				
	5		5.0', grades wet.												
5.48	6														
	7		Grades dark grayish brown.		S4	4 5 4	9	67							
3.48	8									20.4	137.8				PA
	9		Fat CLAY (CH), soft, olive, wet, trace of fine SAND and decayed vegetation, organic odor detected. [BAY MUD]		S5	0 1 3	4	100							
1.48	10														
	11		Grades with frequent decayed vegetation.		U6		100 psi	100							
-0.52	12		CLAYEY SAND (SC), bluish gray, wet, fine. [MARINE SAND]												
	13									66.3	97.4				PI, LL
-2.52	14														
	15														
-4.52	16		Poorly graded SAND with SILT (SP-SM), loose, yellowish brown, fine.												
	17														
-6.52	18				S7	9 7 9	16	67							
	19									23.1	128.1				PA
-8.52	20		Lean CLAY (CL), soft, dark bluish gray, wet, trace of fine SAND. [BAY MUD]		S8	0 0 4	4	100							
	21		CLAYEY SAND (SC), very loose, olive brown, moist to wet, SAND is fine. [MARINE SAND]												
-10.52	22		Poorly graded SAND (SP), medium dense, yellowish brown, wet, fine to medium, with iron-oxide mottling and veins. [COLMA SAND]												
	23				S9	10 23 22	45	100							
-12.52	24		24.0', Grades very dense, with pockets of weak cementation.		S10		57	100		20	136.2				PA
	25														

(continued)

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REPORT TITLE				HOLE ID
BORING RECORD				MPTNB-R2-PZ
DIST.	COUNTY	ROUTE	POSTMILE	EA
4	S.F.	101	8.3/9.4	163701
PROJECT OR BRIDGE NAME				
Doyle Drive Replacement Project				
BRIDGE NUMBER	PREPARED BY		DATE	SHEET
34-0163R	T. Carroll		11-3-08	1 of 4

CALTRANS FORMAT DOYLEDRIVE_ARUPLOGS_11-2-08.GPJ ARUP LIBRARY_CALTRANS FORMAT.GLB 11/3/08

Figure

ELEVATION (ft)	DEPTH (ft)	Material Graphics	Description	Sample Location	Sample Number	Blows per 6 In	Blows per Foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (tsf)	Drilling Method / Casing Depth	Remarks
	25		Poorly graded SAND (SP), medium dense, yellowish brown, wet, fine to medium, with iron-oxide mottling and veins. [COLMA SAND]			9 23 24								
-14.52	26													
	27		Poorly graded SAND with SILT (SP-SM), medium dense, yellowish brown, fine to medium, with heavy iron-oxide mottling, moderately cemented.											
-16.52	28				U11		100 psi	39		23.1	130.1			CU PA
	29													
-18.52	30													
	31													
-20.52	32													
	33				S12	20 32 42	74	100						
-22.52	34		Grades with slight iron-oxide staining, grades to fine SAND.		S13	20 33 50/5"	83/11"	100						
	35													
-24.52	36													
	37		Poorly graded SAND with CLAY (SP-SC), yellowish brown, moist, fine, pockets of iron-oxide staining.											
-26.52	38				U14		150 psi	56						
	39													
-28.52	40													
	41													
-30.52	42		Poorly graded SAND (SP), dense, dark yellowish brown, wet, fine.											
	43				S15	21 30 43	73	100						
-32.52	44		CLAYEY SAND (SC), dense, yellowish brown, moist, fine. 43.5', grades with slight cementation.		S16	15 16 21	37	100		20.6	134.3			PA
	45		45.0', grades with increase ines, with pockets of CLAY.											
-34.52	46													
	47		Poorly graded SAND (SP), very dense, olive brown, moist, fine, trace fines.											
-36.52	48				S17	26 40 50/5"	90/11"	100						After sampling at 47.5', hole caved to 43'
	49													
-38.52	50													
	51													
-40.52	52													
	53				S18	12 28 32	60	100						
-42.52	54													
	55													

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34-0163R	T. Carroll		11-3-08	2 of 4

CALTRANS FORMAT DOYLEDRIVE_ARUPLOGS_11-2-08.GPJ ARUP LIBRARY_CALTRANS FORMAT.GLB 11/3/08

Figure

ELEVATION (ft)	DEPTH (ft)	Material Graphics	Description	Sample Location	Sample Number	Blows per 6 In	Blows per Foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (tsf)	Drilling Method	Casing Depth	Remarks
	55		Poorly graded SAND (SP), very dense, olive brown, moist, fine, trace fines.												
-44.52	56														
	57														
-46.52	58														
	59		SAND grades very fine.		S19	24 29 25	54	100							
-48.52	60														
	61														
-50.52	62														
	63														
-52.52	64				S20	30 50/6"	50/6"	100							
	65														
-54.52	66														
	67		Poorly graded SAND with CLAY (SP-SC), very dense, yellowish brown, moist, fine.												
-56.52	68														
	69				S21	22 22 31	53	100							
-58.52	70		69.8' - 70.0', heavily iron-oxidized zone with fine GRAVEL and coarse SAND.												
	71		Fat CLAY, very stiff, olive brown, moist, trace of fine SAND.												
-60.52	72														
	73		CLAYEY SAND (SC), very dense, dark greenish gray, fine, with lenses of dark greenish gray fat clay - moist.												
-62.52	74				S22	13 26 40	66	100							
	75														
-64.52	76														
	77		Lean CLAY (CL), stiff to very stiff, dark bluish gray, moist, trace SAND, SAND is very fine, with decayed vegetation, with pockets of very fine SAND. [OLD BAY CLAY]												
-66.52	78														
	79				S23	7 10 16	26	100		24.4		PP = 1.0, 1.0, 1.0			PI, LL
-68.52	80														
	81														
-70.52	82														
	83														
-72.52	84		Elastic SILT (MH), stiff to very stiff, dark bluish gray, moist, trace very fine SAND, with decayed vegetation.		U24		200 psi	100							
	85														

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Figure

ELEVATION (ft)	DEPTH (ft)	Material Graphics	Description	Sample Location	Sample Number	Blows per 6 In	Blows per Foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (tsf)	Drilling Method	Casing Depth	Remarks
	85		Elastic SILT (MH), stiff to very stiff, dark bluish gray, moist, trace very fine SAND, with decayed vegetation.							43	114.1	UU = 1.13			PI, LL
-74.52	86									38.4	116	UU = 1.84			
	87											PP = 1.35			
-76.52	88											TV = 0.75, 0.65			
	89		Lean CLAY (CL), stiff to very stiff, dark bluish gray, moist, trace very fine SAND, with decayed vegetation.		U25		100, 200 psi	40		49.3	107.5	PP = 1.25			PI, LL
-78.52	90											TV = 0.73			
	91														
-80.52	92														
	93														
-82.52	94														
	95														
-84.52	96				U26			100							
	97											PP = 1.2			
-86.52	98		98.0', grades with lense of very dark brown lean clay.												
	99		Borehole terminated at a depth of 98 feet on 12/3/2007.												
-88.52	100		See Boring Record Legend for soil classification chart and key to test data and sampler type.												
	101														
-90.52	102														
	103														
-92.52	104														
	105														
-94.52	106														
	107														
-96.52	108														
	109														
-98.52	110														
	111														
-100.52	112														
	113														
-102.52	114														
	115														

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Figure